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09/744,595	01/26/2001	Kojiro Okamoto	0819-416	1644

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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,595

Applicant(s)

OKAMOTO ET AL.

Examiner

Jorge L. Ortiz-Criado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 0205.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 12-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 12 recites the limitation (1) “secondary control information illegally recorded”.

Claim 26 recites the limitation (2) “means for detecting false control information and genuine control information”.

Claim 27 recites the limitation (3) “means for detecting an invalid key information item”

Claim 28 recites the limitation (4) “means for detecting encrypted data by recognizing a flag”

The examiner cannot readily ascertain/map with the above claim language where in the specification as originally filed such a disclosure/support is found in the descriptive portion of the specification by reference to the drawings, designating the part or parts therein to which the terms“(1), (2), (3) and (4) above” applies.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2. Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "said control". There is insufficient antecedent basis for this limitation in the claim and it is unclear to which "control information" (primary or secondary) the claim language is limiting.

Claim 21 recites the limitation "the medium". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in combination with Lokhoff et al. U.S. Patent No. 5,060,219 and further in view of Timmermans et al. U.S. Patent No. 5,930,210.

Regarding claim 12, the admitted prior art discloses a disk-shaped recording medium comprising a primary recording region for recording a data signal based on a user instruction and

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and a secondary recording region which is located on the side of an internal periphery of said primary recording region, wherein in said primary recording region the data signal is recorded, and wherein said secondary recording region has information pits formed to record signal representative of primary control information as data (see page 1, line 20 to page 2 lines 11);

wherein said primary control information in said secondary recording region includes an invalid key information item/"genuine control information"/ for inhibiting reproduction of main data encrypted in said primary recording region by using "secondary control information"/ "control information including key information item and identification information item" illegally recorded in said primary recording region (see page 2, line 3- 20)

said "secondary control information" comprising information for decrypting said main data encrypted in said primary recording region (see page 1, line 25-26 and page 2, lines 9-14)

The admitted prior art fails to disclose wherein said primary recording region has a track which wobbles at a first pitch and wherein said secondary recording region has a track which wobbles at a second pitch different from said first pitch.

Lokhoff et al. discloses a disk-shaped recording medium (See col. 6, lines 20-22) comprising:

a primary recording region (See Fig. 3a, 3e)

and a secondary recording region which is located on the side of an internal periphery of said primary recording region (See Fig. 3a, 3c),

wherein said primary recording region has a track which wobbles at a first pitch/frequency and along which a user is able to record a data signal (See col. 6, lines 33-35; Fig. 3a, 3e);

and wherein said secondary recording region has a track which wobbles at a second pitch/frequency different from said first pitch/frequency and along information pits are formed to record signal representative of control information as data (See col. 2, lines 50-58; col. 6, lines 20-35. lines 56-63; Fig. 3a, 3c, 3e).

Lokhoff et al. teaches using the “pitch/frequencies/wobbles/sinusoidal undulation” of the track for the first and second recording regions to determine the position of the track to be scanned. Lokhoff et al. further teaches wherein the control information in said secondary recording region is for inhibit/disabling/enabling/ operations indicated by the control information being read from the recording medium (See col. 1, lines 40-55; col. 2, lines 50-58)

Timmermans et al, teaches a recording medium which includes a tracks having which wobbles at predetermined a pitch/frequency along information pits are formed to record data signal (see col. 6, lines 12-56; Fig. 1a-1b)

It would have been obvious to one with ordinary skill in the art at the time of the invention to provide the primary recording region with a track which wobbles at a first pitch/frequency and the secondary recording region with a track which wobbles at a second pitch/frequency different from said first pitch, because by doing that provides detection of position of the region and track portion to be reproduced/scanned as taught by Lokhoff et al., and further enabling recovering/reproducing of the tracks having a predetermined pitch/frequency and that in the case of the absence of the predetermined pitch/frequency the recovery/reproduction is disable as taught by Timmermans et al, by doing so it would disable the recovery/reproduction of the “secondary control information illegally recorded/not genuine information” in the primary

recording region and enabling reproduction/recovering of the genuine control information in the secondary recording region .

Regarding claim 13, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above, would show wherein the control information is prerecorded at the time of manufacture of said recording medium (See Lokhoff et al. col. 1, lines 40-55; col. 2, lines 50-58; Fig. 3a, 3c)

Regarding claim 14, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein the primary control information includes an identification information item representative of the type of said recording medium (See the admitted prior art page 2, line 3- 20)

Regarding claim 15, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show a reproducing apparatus for reproduction of main data recorded in said primary recording region of said recording medium (See Timmermans et al. col. 5, lines 13-25; Figs. 1a, 1b, 1c, 3, 5), said reproducing apparatus comprising:

a pickup for reading a signal from said recording medium under rotation (See Timmermans et al. col. 5, lines 30-34; Fig. 5, Ref# 52)

means for shifting said pickup (See Timmermans et al. col. 5, line 53 to col. 6, line 1-56; Fig.5 Ref# 60)

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means for distinguishing if a reproduction location of said recording medium is the track which wobbles as said first pitch or the track which wobbles at said second pitch different from said first pitch or does not wobble (See Timmermans et al. col. 5, line 53 to col. 6, line 1-56; Fig.5 Ref# 60);

wherein the case where according to said means for distinguishing the reproduction location of said recording medium, the reproduction location is said primary recording region having said track pitch which wobbles at said first pitch, and the main data encrypted in said primary recording region are being recorded, said pickup is shifted to said secondary recording region by said means for shifting said pickup (See Timmermans et al. col. 5, line 53 to col. 6, line 1-56; Fig.5 Ref# 60),

and the reproduction of the main data encrypted in said primary recording region by using “secondary control information”/ “control information including key information item and identification information item” “illegally recorded” in said primary recording region is inhibited by the invalid key information item included in said primary control information in said secondary recording region (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5,Ref# 61,62; only reproducing the track with the predetermined pitch/frequency, recovering the genuine control information in the secondary region of the admitted prior art R disk)

Regarding claim 16, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show means for spinning said recording medium at a constant linear velocity (See col. 5, lines 28-30; lines 63-65; Fig. 5, Ref. #50)

wherein the case where according to said means for distinguishing the reproduction location of said recording medium, the reproduction location is said track pitch which wobbles at said second pitch or does not wobble and the reproduction of the main data encrypted in said primary recording region is terminated by a key information item included in said control information obtained from a means for obtaining said control information (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5, Ref# 61,62)

Regarding claim 17, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show means for spinning said recording medium at a constant linear velocity (See Timmermans et al. col. 5, lines 28-30; lines 63-65; Fig. 5, Ref. #50)

means by which a signal read position by said pickup follows said tracks of said recording medium (See Timmermans et al. col. 5, lines 34-60; Fig. 5, Ref# 55),

means for generating a tracking error signal from an output of said pickup (See Timmermans et al. col. 5, lines 34-60; Fig. 5, Ref# 56), and

means for starting reproduction of said main data recorded in said primary recording region (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5, Ref# 61,62)

Regarding claim 18, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show control information includes an identification information item representative of the type of said recording medium (See Timmermans et al., col. 7, lines 1-21), and

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wherein said reproducing apparatus further comprises means for canceling when said identification information item indicated that recording of data signal into said primary recording region by user is possible and, in addition, main data recorded in said primary recording region is encrypted, reproduction of said main data (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5, Ref# 61,62)

Regarding claim 19, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show, means for continuing when main data recorded in said primary recording region is not encrypted, reproduction of said main data (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5, Ref# 61,62)

Regarding claim 20, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein "said control information" includes de-cryption information (See Timmermans et al. col. 6, line 45 to col. 7, line 21; Fig. 5, Ref# 61,62)

Regarding claim 21, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein the medium is an R-Type (see the admitted prior art page 2, lines 3-20)

Regarding claim 22, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein false control information is

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copied into said primary recording region of said R-type digital video disk and genuine control information in said secondary recording region of said R-type digital video disk provides a copy protection scheme (see the admitted prior art page 2, lines 3-20)

Regarding claim 23, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein said genuine control information in said secondary recording region of said R-type digital video disk comprises an invalid key information item for inhibition of reproduction of encrypted main data when said encrypted main data is copied and recorded in said primary recording (see the admitted prior art page 2, lines 3-20)

Regarding claim 24, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show (see the admitted page 1, line 20 to page 2, line 20; encrypted data)

Regarding claim 25, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein the identification information representative of the type of said recording medium is representative of an R-type digital video disk (see the admitted page 1, line 20 to page 2, line 20)

Regarding claim 26, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show means for detecting false control

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information copied into said primary recording region of said R-type digital video disk and genuine control information in said secondary recording region of said R-type digital video disk to provide a copy protection scheme (See Timmermans et al. col. 5, lines 30-34; Fig. 5, Ref# 52,60)

Regarding claim 27, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show wherein means for detecting genuine control information in said secondary recording region of said R-type digital video disk further comprises means for detecting an invalid key information item for inhibition of reproduction of encrypted main when said encrypted main data is copied and recorded in said primary recording region (See Timmermans et al. col. 5, lines 30-34; Fig. 5, Ref# 52,60)

Regarding claim 28, the combination of the admitted prior art in combination with Lokhoff et al. and Timmermans et al. as modified above would show means for detecting encrypted data by recognizing a flag located at the head of each decided section of main data (See Timmermans et al. col. 5, lines 30-34; Fig. 5, Ref# 52,60)

Response to Arguments

5. Applicant's arguments with respect to claim 12-28 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER